

---

IN THE CLAIMS

---

1 (1) Claim 1: (currently amended) A telephone call and voice processing system  
2 comprising:  
3 switching circuitry for receiving a call, wherein the switching circuitry connects the  
4 call to [[a]] one of a plurality of telecommunications [[device]] devices coupled to the system  
5 in accordance with information accompanying the call that identifies the telecommunications  
6 device; and  
7 voice processing circuitry for automatically interacting with the call, wherein the  
8 switching circuitry and the voice processing circuitry are controlled by not more than one  
9 microprocessor.

1 (2) Claim 2: (previously amended) The system as recited in claim 1, wherein the  
2 voice processing circuitry further comprises a signal processing circuitry coupled to the  
3 one microprocessor.

1 (3) Claim 3: (previously amended) A telephone call and voice processing system  
2 comprising:  
3 switching circuitry for receiving a call, wherein the switching circuitry connects the  
4 call to a telecommunications device coupled to the system; and  
5 voice processing circuitry for automatically interacting with the call, wherein the  
6 switching circuitry and the voice processing circuitry are controlled by a single processing  
7 means, wherein the voice processing circuitry further comprises a signal processing circuitry  
8 coupled to the single processing means, wherein the switching circuitry further comprises a  
9 digital cross-point matrix coupled to the single processing means and to the signal processing  
10 circuitry.

(4) Claim 4: (previously cancelled)

(5) Claim 5: (previously cancelled)

1 (6) Claim 6: (currently amended) A telephone call and voice processing system  
2 comprising:

3 a plurality of telecommunications devices coupled to the system as extensions;  
4 switching circuitry for receiving a call, wherein the switching circuitry connects the  
5 call to [[a]] one of the telecommunications [[device coupled to the system]] devices; and  
6 voice processing circuitry for automatically interacting with the call, wherein the  
7 switching circuitry and the voice processing circuitry are controlled by a single processing  
8 means, wherein the single processing means is controlled by a single set of software operable  
9 for controlling both the switching circuitry and the voice processing circuitry.

(7) Claim 7: (previously cancelled)

(8) Claim 8: (previously cancelled)

(9) Claim 9: (previously cancelled)

(10) Claim 10: (previously cancelled)

(11) Claim 11: (previously cancelled)

1 (12) Claim 12: (currently amended) A telephone call and voice processing system  
2 comprising:

3 switching circuitry for receiving a call, wherein the switching circuitry connects the  
4 call to a telecommunications device coupled to the system; and  
5 voice processing circuitry for automatically interacting with the call, wherein the  
6 switching circuitry and the voice processing circuitry are controlled by a single processing  
7 means, wherein the voice processing circuitry further comprises a signal processing circuitry  
8 coupled to the single processing means, wherein the signal processing circuitry further  
9 includes:

1 a DTMF receiver operable for recognizing DTMF tones from the call and instructing  
2 the switching circuitry to connect the call to the telecommunications device identified by the  
3 DTMF tones.

(13) Claim 13: (cancelled)

(14) Claim 14: (previously cancelled)

(15) Claim 15: (previously cancelled)

(16) Claim 16: (cancelled)

(17) Claim 17: (previously cancelled)

1 (18) Claim 18: (currently amended) The system as recited in claim 1, further  
2 comprising circuitry operable for recording all or a portion of the call during an off-hook  
3 state after the telecommunications device is connected to the call.

1 (19) Claim 19: (original) The system as recited in claim 18, wherein the recording  
2 circuitry operates in response to a [[tactilely initiated activating signal]] user manually  
3 pressing a button on a telephone set.

1 (20) Claim 20: (original) The system as recited in claim 19, wherein the recording  
2 circuitry further comprises:  
3 circuitry for coupling a recording buffer in the signal processing circuitry to the call,  
4 wherein the signal processing circuitry is coupled to the single processing means.

(21) Claim 21: (previously cancelled)

(22) Claim 22: (previously cancelled)

(23) Claim 23: (previously cancelled)

1 (24) Claim 24: (original) The system as recited in claim 1, further comprising:  
2 circuitry for listening to a voice signal at a telephone extension coupled to the system;  
3 circuitry for activating a recording sequence to record the voice signal; and  
4 circuitry for storing the recorded voice signal in a digital memory.

1 (25) Claim 25: (original) The system as recited in claim 24, wherein the activating  
2 circuitry is tactilely initiated by a user of the telephone extension.

1 (26) Claim 26: (original) The system as recited in claim 25, wherein the voice signal  
2 originated from the call.

1 (27) Claim 27: (previously amended) A telephone call and voice processing system  
2 comprising:

3 switching circuitry for receiving a call, wherein the switching circuitry connects the  
4 call to a telecommunications device coupled to the system;

5 voice processing circuitry for automatically interacting with the call, wherein the  
6 switching circuitry and the voice processing circuitry are controlled by a single processing  
7 means;

8 circuitry for listening to a voice signal at a telephone extension coupled to the system;

9 circuitry for activating a recording sequence to record the voice signal; and

10 circuitry for storing the recorded voice signal in a digital memory, wherein the  
11 activating circuitry is tactically initiated by a user of the telephone extension, wherein the  
12 voice signal originated from a voice mail message stored in the system.

(28) Claim 28: (previously cancelled)

(29) Claim 29: (previously cancelled)

(30) Claim 30: (previously cancelled)

(31) Claim 31: (previously cancelled)

(32) Claim 32: (previously cancelled)

- (33) Claim 33: (previously cancelled)
- (34) Claim 34: (previously cancelled)
- (35) Claim 35: (previously cancelled)
- (36) Claim 36: (previously cancelled)
- (37) Claim 37: (previously cancelled)
- (38) Claim 38: (previously cancelled)
- (39) Claim 39: (previously cancelled)
- (40) Claim 40: (previously cancelled)
- (41) Claim 41: (previously cancelled)
- (42) Claim 42: (previously cancelled)
- (43) Claim 43: (previously cancelled)
- (44) Claim 44: (previously cancelled)
- (45) Claim 45: (previously cancelled)
- (46) Claim 46: (previously cancelled)
- (47) Claim 47: (previously cancelled)
- (48) Claim 48: (previously cancelled)
- (49) Claim 49: (previously cancelled)
- (50) Claim 50: (previously cancelled)

(51) Claim 51: (previously cancelled)

(52) Claim 52: (previously cancelled)

(53) Claim 53: (previously cancelled)

(54) Claim 54: (previously cancelled)

(55) Claim 55: (previously cancelled)

(56) Claim 56: (previously cancelled)

(57) Claim 57: (previously cancelled)

C 1 (58) Claim 58: (currently amended) In a telephone call and voice processing system  
2 comprising switching circuitry for receiving [[a call]] an incoming call from a source  
3 external to the system, wherein the switching circuitry connects the incoming call to a  
4 telecommunications device coupled to the system from among a plurality of  
5 telecommunications devices connected as telephone extensions to the system, and voice  
6 processing circuitry for automatically interacting with the call, wherein the switching  
7 circuitry and the voice processing circuitry are controlled by a single processing means, a  
8 method comprising the steps of:

9 listening to a voice signal at a telephone extension coupled to the system;  
10 activating a recording sequence to record the voice signal; and  
11 storing the recorded voice signal in a memory.

1 (59) Claim 59: (original) The method as recited in claim 58, wherein the activating  
2 step is tactilely initiated by a user of the telephone extension.

1 (60) Claim 60: (original) The method as recited in claim 58, wherein the voice signal  
2 originated from the call to the system.

1 (61) Claim 61: (original) The method as recited in claim 58, wherein the voice signal  
2 originated from a voice mail message stored in the system.

(62) Claim 62: (previously cancelled)

(63) Claim 63: (previously cancelled)

(64) Claim 64: (previously cancelled)

(65) Claim 65: (previously cancelled)

(66) Claim 66: (previously cancelled)

(67) Claim 67: (previously cancelled)

(68) Claim 68: (previously cancelled)

1 (69) Claim 69: (previously added) A telephone call and voice processing system  
2 comprising:

3 switching circuitry for receiving [[a]] an incoming call from a source external to the  
4 system, wherein the switching circuitry connects the incoming call to one of a plurality of  
5 telecommunications devices coupled to the system as extensions to the system; and

6 voice processing circuitry for automatically interacting with the call, wherein the  
7 switching circuitry and the voice processing circuitry are controlled by a single  
8 microprocessor.

1 (70) Claim 70: (previously added) A telephone call and voice processing system  
2 comprising:

3 switching circuitry for receiving a call, wherein the switching circuitry connects the  
4 call to one of a plurality of telecommunications devices coupled to the system; and

5 voice processing circuitry for automatically interacting with the call, wherein the  
6 switching circuitry further comprises a digital cross-point matrix.

1 (71) Claim 71: (currently amended) A telephone call and voice processing system  
2 comprising:

3 a plurality of telecommunications devices connected to the system as telephone  
4 extensions accessible solely through the switching circuitry;

5 switching circuitry for receiving a call, wherein the switching circuitry connects the  
6 call to [[a]] one of the plurality of telecommunications [[device]] devices coupled to the  
7 system;

8 voice processing circuitry for automatically interacting with the call, wherein the  
9 switching circuitry and the voice processing circuitry are controlled by a single processing  
10 means;

11 circuitry for listening to a voice signal at [[a]] one of the telephone [[extension]]  
12 extensions coupled to the system;

13 circuitry for activating a recording sequence to record the voice signal; and

14 circuitry for storing the recorded voice signal in a digital memory.

(C) 1 (72) Claim 72: (previously added) A telephone call and voice processing system  
2 comprising:

3 switching circuitry for receiving a call, wherein the switching circuitry connects the  
4 call to a telecommunications device coupled to the system;

5 voice processing circuitry for automatically interacting with the call, wherein the  
6 switching circuitry and the voice processing circuitry are controlled by a single processing  
7 means; and

8 circuitry for permitting a user of a telephone coupled to the system to monitor a voice  
9 mail message while the message is being recorded into the user's mailbox.

1 (73) Claim 73: (new) The system as recited in claim 1, wherein the information is  
2 detected DTMF tones.

1 (74) Claim 74: (new) The system as recited in claim 1, wherein the call is received by  
2 the switching circuitry from a central office trunk line.



1 (75) Claim 75: (new) The system as recited in claim 6, wherein the call is received  
2 from a source external to the system, and is connected to one of the telecommunications  
3 devices in accordance with detected DTMF tones accompanying the call, wherein the  
4 DTMF tones identify the telecommunications device to which the call is directed.

1 (76) Claim 76: (new) The system as recited in claim 12, wherein the  
2 telecommunications device is one of a plurality of telephone extensions connected to the  
3 switching circuitry.

1 (77) Claim 77: (new) The system as recited in claim 27, wherein the call is an  
2 incoming call received by the switching circuitry via a central office trunk line, and  
3 wherein the switching circuitry connects the incoming call to one of a plurality of  
4 telecommunications devices coupled to the system as telephone extensions to the system.

C 1 (78) Claim 78: (new) The method as recited in claim 58, wherein the external source is  
2 a central office trunk line.

1 (79) Claim 79: (new) The method as recited in claim 58, wherein the switching  
2 circuitry connects the incoming call to one of the plurality of telecommunications devices  
3 in response to information accompanying the incoming call that identifies the  
4 telecommunications device to which the incoming call is connected to.

1 (80) Claim 80: (new) The system as recited in claim 69, wherein the external source is  
2 a central office trunk line.

1 (81) Claim 81: (new) The system as recited in claim 69, wherein the switching  
2 circuitry connects the incoming call to one of the plurality of extensions in response to  
3 information accompanying the incoming call that identifies the one of the plurality of  
4 extensions.

1 (82) Claim 82: (new) The system as recited in claim 81, wherein the information is  
2 detected DTMF tones.

1 (83) Claim 83: (new) A telephone call and voice processing system comprising:  
2 a single microprocessor;  
3 switching circuitry controlled by the single microprocessor;  
4 a trunk line connected to the switching circuitry and adaptable for connecting to  
C 5 central office trunk circuitry;  
6 a plurality of telephone extensions;  
7 extension lines coupling the plurality of telephone extensions to the switching  
8 circuitry, wherein a call received by the switching circuitry over the trunk line is connected  
9 to one of the plurality of telephone extensions by the switching circuitry in response to  
10 information accompanying the call which identifies the one of the plurality of telephone  
11 extensions the call desires to be connected to; and  
12 voice processing circuitry for automatically interacting with the call such as for  
13 coupling the call to a voice mail box associated with the one of the telephone extensions.

---